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Skills Development Division

Skills

"Logic Aboard" welcome sight in Huron County

A travelling microcomputer course is being offered at thirteen small businesses in Huron and Perth counties as a result of collaboration between the Huron County Community Industrial Training Committee (CITC) and Conestoga College.

Glen Machan, a teacher on leave from the Huron County Board of Education, has equipped a van with IBM microcomputers and delivers his mobile courses to workplaces in the towns of Huron County on behalf of Conestoga College. The courses are funded through Ontario's Training in Business and Industry (TIBI) program, which provides some assistance to employers whose workers take the training.

The Machan van, known as Logic Aboard, has become a welcome sight in Goderich,

range of industrial training that has not previously been readily available in Ontario.

Ontario's auto-parts manufacturers have discovered that new methods exist that can lead to dramatic improvements in quality and productivity, and post-secondary educators have found that these brave new disciplines have to be taught.

In its role as a catalyst, OCAPT has promoted a series of enlightening innovations. These include courses in statistical process control (described as the greatest secret of Japanese auto makers), the "just-in-time" system of inventory reduction, and the quick die change method for the improved utilization of production machinery.

OCAPT is one of six high-technology centres recently established in Ontario through special funding by the Board of Industrial Leadership and Development (BILD), a committee of the Ontario Cabinet. The centres are Crown corporations operating under the Ministry of Industry and Trade.

At a recent one-day seminar in Toronto, the St. Catharines-based OCAPT joined forces with the Seneca and Humber colleges of applied arts and technology in an innovative presentation for top representatives from Ontario's auto parts manufacturing companies. This seminar, one of a series held across Ontario in conjunction with various post-secondary institutions, provided an exciting introduction to statistical process

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Colleges and tech centre launch new high-tech courses

Only one year after its opening, the Ontario Centre for Automotive Parts Technology (OCAPT) is already having a major impact on the latest high-tech upgrading of Ontario's automotive-parts producers.

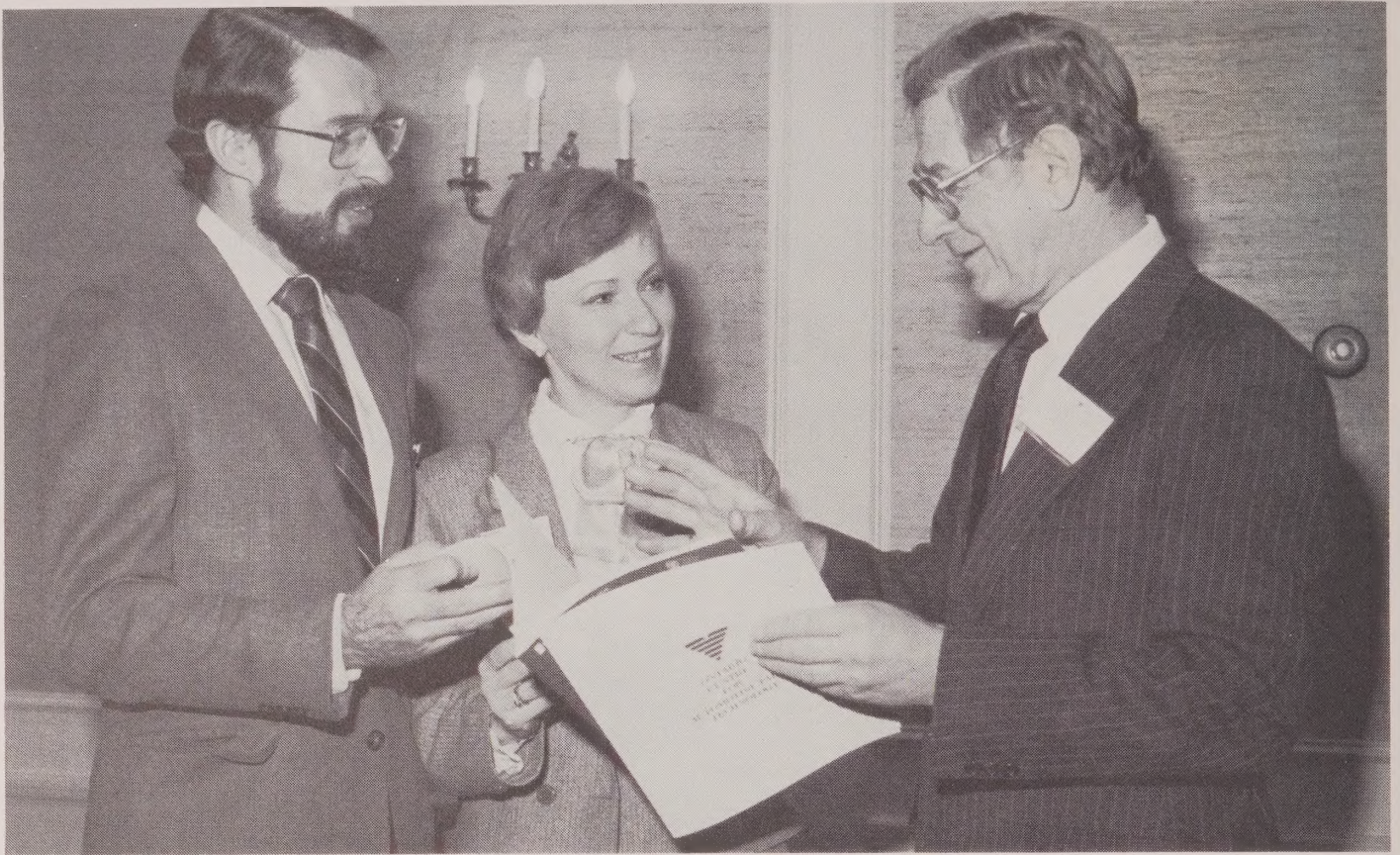
By helping to launch new high-tech courses in conjunction with Ontario's colleges and universities, OCAPT has demonstrated to auto-parts producers and to educational institutions that there is a new, creative

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George Lacy (right), president of the Ontario Centre for Automotive Parts Technology, looks over seminar plans with Janis Miller of Humber College and Don Rutherford of Seneca College.

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control (SPC) for the improvement of quality and productivity.

Jim Marino, OCAPT's manager of information services, reported that the one-day seminars are "pump-priming exercises" designed to show the advantages of SPC and to motivate manufacturers to have their employees take the new SPC courses that the colleges are beginning to offer.

Participants were told that to remain competitive Ontario parts manufacturers must switch from defect detection to defect prevention, a change that can be facilitated through the use of computerized SPC techniques.

Developed during the 1950s by American statistician Dr. W. Edwards Deming, SPC was first implemented by the Japanese, who used it to transform their substandard products of the postwar years into high quality goods.

The Deming method uses control charts that indicate the range of quality in the parts being produced. When workers are trained to use these charts to record all disparities in the production process, problem areas are quickly identified, and solutions can be prescribed.

Central to the development of the Deming method is the use of "human technology", whereby workers are involved in contributing ideas and suggestions that may improve both quality and productivity. When workers are asked to monitor the quality of their own production on Deming charts, increases in productivity and efficiency result.

The SPC seminar was presented by John Long of Durham College, Oshawa. Using several mechanical models and bead boxes, he illustrated the importance of producing parts that are well within the limits of specifications. He described procedures perfected by the Japanese for keeping the deviation of production parts as close to the zero point as possible on a specification graph.

After Mr. Long's presentation, participants expressed interest in further study of SPC. Many inquiries were directed to consultants representing Seneca and Humber colleges, the co-sponsors of the SPC seminar. Don Rutherford represented Seneca, and Janis Miller, Humber.

If the Ontario parts industry is to remain competitive, it must switch to defect detection, Mr. Long said.

In his opening remarks at the seminar, George Lacy, president of OCAPT, described the role of the centre as that of a catalyst, facilitating the interaction of colleges and industries. One of its major functions is the transfer of worldwide technological developments related to productivity and quality to Ontario parts manufacturers. Since one in six jobs in Ontario is related to the automotive industry, OCAPT supports an important segment of the economy.

Ontario's 800 auto-parts suppliers employ 50 000 people, and another 50 000 Canadians are employed by Canada's four domestic auto makers. But the North American system of manufacturing has been based on the stockpiling of parts and materials, with every company in the product chain carrying large inventories.

The Japanese were quick to see the inherent inefficiency in large inventories, and the "just-in-time" (JIT) method was devised in Japan to resolve the problem, Mr. Lacy said.

The JIT method is the subject of another seminar and course being promoted by OCAPT. JIT has as its objective the production of the exact number of units required for an assembly plant within hours, not weeks, of the time they are needed.

The Japanese have found that this system reduces operating costs and enhances quality. Since inventories are small, production problems are spotted quickly, diagnosed, and corrected. Without the false security of a large back-up inventory of parts, assembly-line workers are more careful in order to avoid shut-downs, and parts producers must be certain that their shipments have no defects.

Since Ontario parts suppliers are located close to assembly operations, as in Japan, there is no reason why the JIT inventory system could not work here just as well. Mr. Lacy reported that the centre does not simply give advice to Ontario manufacturers; the centre's staff takes a hands-on approach, visiting the manufacturers and working directly with local management and employees. They evaluate the productivity and quality potential of the manufacturer, assess problems, and implement solutions.

To improve parts manufacturers' technical capabilities, the centre's consultants

draw from the work of the Ontario Research Foundation, the National Research Council, Ontario universities and colleges, and similar institutions around the world.

Preparing manufacturers for world markets is another way in which the centre provides assistance. For many small Ontario companies, marketing outside North America means entering unknown territory. The centre can develop an assessment of foreign market opportunities and provide intelligence reports and an understanding of foreign requirements.

Even these functions of the centre are being implemented in co-operation with Ontario's colleges of applied arts and technology. According to Mr. Lacy, "We have a tremendous demand for quality today, not just in cars, but everything. The public is paying more for goods today and demanding better quality. It doesn't matter whether you're talking about clothes, refrigerators, washing machines, or cars, quality is in demand. That's one of the basic reasons for the existence of Ontario's high-technology centres."

OCAPT seminars have been scheduled for many communities, including Toronto, Hamilton, London, Windsor, Chatham, Oakville, and St. Catharines. Further information can be obtained by writing to OCAPT, 63 Church Street, St. Catharines, Ontario L2R 3C4 (416/688-2600).

NITAC sponsors industrial training in Cobourg

Industrial training, never before available in Cobourg, a town of 12 000, has become a reality through the co-operation of local employers, Sir Sandford Fleming College, and the Northumberland and Newcastle Board of Education.

Using a redundant classroom at Cobourg East District Collegiate, the Northumberland Industrial Training Advisory Committee (NITAC) has sponsored post-secondary technical programs for local students who would otherwise have had to leave home to acquire skills training.

NITAC members, representing local industries, the school board, the college, and three levels of government, were firm in their resolve that advanced skills training should be available in Cobourg.

Bernie Paziuk, NITAC chairman and a local official of the Canadian General Electric Company, reported that local employers share the credit for the success of the training programs by agreeing to release their employees one day a week, with pay, in order to make skills training possible.

NITAC's involvement in local skills training is set to expand this April with the introduction of a course in plastics technology, a first-ever opportunity designed to benefit employees of local industries.

Since its inception in 1979, NITAC has arranged courses for industrial maintenance mechanics, offering courses at basic, intermediate, and advanced levels of difficulty and using instructors from Sir Sandford Fleming and teachers of the Northumberland and Newcastle Board of Education.

About eighty students are currently involved in courses leading to industrial-maintenance-mechanic certification. Last fall, NITAC honoured its first class of twenty-eight graduates of the 8000-hour industrial-training programs that began four years ago.

The graduates completed their courses by attending classes one day a week while employed by local industries such as Eldorado Resources, Horizon Plastics, General Foods, Weetabix, Cooper Tool, United Tire, Columbus McKinnon, Borg Warner, and General Wire and Cable.

NITAC has also sponsored courses for machinists, mould makers, and tool and die makers, as well as a training update for local electricians.

Ian Steele, manager of industrial training for Sir Sandford Fleming, said that the update for electricians is designed to review innovations such as microcomputer technology and will focus on programmable logic controllers, a specialty that was identified as a local training need by NITAC.

Mr. Steele reported that the college's co-operation with the Northumberland and Newcastle Board of Education has been mutually beneficial. New machinery for the welding and machinist trades was purchased and installed at Cobourg East District Collegiate, providing an advantage for secondary school students, who also use it.

George Davis, technical director at the secondary school, said that the program

has operated smoothly and has been enhanced by the Linkage program, which allows many of his secondary students to earn hours towards an apprenticeship in certain trades. The new equipment has increased the opportunities for Linkage programs.

The interaction between secondary students and older students has been positive, Mr. Davis said. Our young students have had greater motivation after seeing grown-ups - in some cases friends and relatives - coming back to school for more training.

"We had an interesting case last year, with a father-and-son combination attending Cobourg East at the same time. The son was one of our secondary students, and the father was a participant in the skills-training program."

Mr. Davis said that the local availability of advanced skills training has inspired his students to pursue technical careers that they might not have chosen if they had had to move to Peterborough or Toronto for training, as was the case before NITAC activities began.

Thanks, OCAP!

R. Cameron and D. Carder would like to share some of the praise recently heaped on the Ontario Career Action Program (OCAP) in the Seneca College area in the following letter from David Porter, a man who has seen first-hand the value of OCAP to local young people.

Dear Mr. Carder:

I am writing this letter to express my gratitude towards all of you involved in the Ontario Career Action Program.

In the twenty-one years that I have served as a counsellor for both York Region Public and Separate School Boards, I have not seen a program that addresses the needs of young people as intelligently and sensitively as OCAP. Its format is one that leads somewhere for the kids lucky enough to become involved in the program. Not only have those in my charge either located full-time, gainful employment or returned to institutions of higher learning, but they have blossomed forth as real people with a sense of responsibility towards themselves and their community.

A partnership now exists in this region between established education and business and industry because of OCAP. Employers have seen that young people can learn on the job and are approaching me to ask if "you've got another kid around as solid as young Danny."

There are a number of incentive programs being initiated to support the incorporation of young people into the work force, but I wonder if any can do the job as effectively or as economically as OCAP. In the case of all of the youngsters that I have recommended to you, the \$1600.00 per person grant has negated any chance of the recipients ending up on either the welfare rolls or standing in line at the employment offices.

You have served my kids well and have given our school system a real knowledge of the benefits of on-the-job training.

One of the most satisfying experiences that I have had this year involved my hiring of four young people to provide tutoring help for a number of elementary school students badly in need of both academic and emotional support. The comments that I received from the principals and teachers at the end of last month were ecstatic. Not one child has skipped school since the program began and all are up to their grade level and getting along well at home. Two of the OCAP participants are gainfully employed and two have returned to school in order to pursue their long-term career goals at the college level.

I just don't see these kind of statistics in any other area.

This letter is getting a little long but it is difficult to conserve words when you are writing about something that you really believe in.

My thanks to you and your staff for all your support. May OCAP be around in this area and others within the province for a long, long time.

Yours respectfully,

David Porter
Attendance Counsellor, Area 2
York County Board of Education

Creation of jobs number one problem of governments – Grossman

The following are excerpts from an address by the Honourable Larry Grossman, Treasurer of Ontario and Minister of Economics, to the meeting of ministers of finance in Montreal on December 8, 1983.

The number one problem facing governments in Canada today is the creation of jobs. As a result of the economic recovery now under way, we have regained most of the jobs lost during the recession. Since November of 1982, employment in Ontario has grown by 196 000; we have recovered 88 per cent of the prerecession level of employment. In Canada, employment has increased by 370 000.

The job-creation programs of all jurisdictions have made a significant contribution to the progress we have achieved to date. It is important as well to recognize the contribution of our restraint and anti-inflation programs to creating a more secure economic environment, which has helped to restore consumer and investor confidence.

At the same time, in carrying out our commitment to sustain the economic recovery and add to employment growth in the short term, we must recognize that the advanced industrial nations are undergoing a fundamental and far-reaching transformation. There will be massive and significant restructuring in our goods-producing sector and new strength in the service sector. These developments can provide great new potential for growth.

We have a responsibility to ensure that our economy benefits from this transformation in terms of more and better jobs, real income growth at a low rate of inflation, and an expanding range of opportunities for women and young people.

Our job-creation programs should have four main features: (1) to provide training; (2) to provide relevant experience; (3) to accomplish needed modernization of our physical infrastructure; and (4) to address social-infrastructure requirements.

We simply cannot afford "make-work" projects that do not provide lasting benefits.

To ensure that our-job creation efforts contribute to economic confidence, all levels of government must combine their efforts so that our objectives can be met efficiently and effectively. This will require a greater degree of consultation, co-operation, and sharing of information about the design of programs.

In order to avoid duplication and conflict of program objectives, governments must consult and agree upon national and regional job-creation and training priorities.

Taking these priorities into account, we must then ensure that the design of our human resource programs complement and reinforce each other's efforts to the extent possible.

The provinces and the federal government should co-operate to ensure that we take advantage of the most efficient means of delivering employment and skill-development programs. In practice this means recognizing the level of government that has the greater capacity to meet the needs of the community or group being served. Employment programs that rely on the tax system might be better delivered by the federal government. Programs tailored to specific community or group needs may be more suited to provincial delivery mechanisms. Ideally, the emphasis should be on co-operative approaches that make use of the advantages of both orders of government. Ontario regards the recent Canada-Ontario Employment Development (COED) program as a successful example of this approach.

Finally, in human-resource programs where both levels of government are involved, we must avoid duplication of expenditures. For example, both Ontario and the federal government have implemented capital-accelerated programs. Without consultation on the timing, location, and target labour force, too much activity might be concentrated on some communities or groups of unemployed persons at the expense of others.

Organizational adjustments

The following organizational adjustments have been effected within the Skills Development Division.

A Special Needs Group Section has been established within the Planning and Development Branch. It will assist individuals with unique training requirements who wish to access the skills development system. "Special Needs Groups" include Natives (status and non-status Indians, Metis, and Inuit), persons with physical, emotional, or mental disabilities, and women entering non-traditional occupations.

The staff members of the section are L. Scott Tyrer, manager; Joyce King, co-ordinator; and Viji Rachamalla, administrative assistant. They can be contacted at:

Special Needs Group Section
Planning and Development Branch
Skills Development Division
16th Floor, Mowat Block
900 Bay Street
Toronto, Ontario
M7A 1L2

416/965-0906

Nancy Dow, formerly of the division's Operations Branch, has been appointed Special Assistant, Office of the Assistant Deputy Minister.

In her new position, Ms. Dow will, in addition to other duties, be responsible for the administration of the division's communications activities, including the Skills newsletter.

Ms. Dow can be contacted at:

Office of the Assistant Deputy Minister
Room 2237
22nd Floor, Mowat Block
900 Bay Street
Toronto, Ontario
M7A 1L2

416/965-5342

Summary of Workshops

Community Industrial Training Committee
Chairmen's Seminar, November 17-18, 1983

Prepared by

Rod McLeod
Federal Co-Chairman
Canada Employment and
Immigration Commission
(Ontario Region)

L. Scott Tyrer
Provincial Co-Chairman
Skills Development Division
Ministry of Colleges
and Universities

Assisting displaced workers

Presenters

Lisa Avedon, Conestoga College
 Bob Miller, Skills Development Division
 Abbas Naqvi, Canada Employment and
 Immigration Commission
 Harry Shardlow, Ministry of Labour

Workshop team

Abbas Naqvi, Canada Employment and
 Immigration Commission
 Bob Miller, Skills Development Division

Summary. Mr. Naqvi outlined the Canada Employment and Immigration Commission (CEIC) programs and services that are available to assist the unemployed. These include unemployment insurance and employment counselling. The emphasis was placed on employment-training programs, which can assist unemployed workers to acquire new employment skills or provide for training for workers while they are unemployed.

Mr. Shardlow summarized the legislative requirements that affect employers who intend to close plants or to initiate large-scale permanent layoffs and outlined the objectives and procedures of manpower adjustment committees. He described the Ontario Employee Assistance Program (OEAP), which assists workers affected by disruptions. The slide-and-tape presentation "Where Do I Go From Here" was screened in order to illustrate the problems faced by affected workers.

Ms. Avedon explained the particular difficulties encountered by workers who become unemployed as a result of a plant closure or permanent layoff. She described some of the techniques used by counsellors to assist workers to cope with unemployment and outlined the steps that are followed by workers in identifying and implementing employment alternatives.

Mr. Miller reported on the status of Alternate Work Experience projects for unemployed apprentices. He also outlined the implementation of the special initiatives of the Board of Industrial Leadership and Development (BILD) for the training and retraining of laid-off workers and solicited the advice of the group with respect to existing or suggested strategies for assisting displaced workers/trainees.

Conclusion. Programs for assisting displaced workers should continue and, if possible, be extended to assist a greater number of the unemployed.

The success of Alternate Work Experience programs is not consistent. However, greater consistency might be attained if training programs were conducted outside of company premises.

High levels of wage reimbursement for first- and second-year trainees exacerbate the unemployment situation of third- and fourth-year trainees. The current subsidy structure encourages employers to hire new, or relatively new, trainees, for whom they can receive a large subsidy, rather than to hire partially trained persons, for whom the wage subsidy is less. Governments should investigate a revised subsidy structure in order to remedy this situation.

Federal and provincial programs

Presenters

Bob Nizich, Canada Employment and
 Immigration Commission
 John Richards, Skills Development Division
 Bill Fields, Skills Development Division

Workshop team

Bob Nizich, Canada Employment and
 Immigration Commission
 John Richards, Skills Development Division

Summary. Each session was introduced by John Richards and by a showing of the provincial audio-visual presentation "Skills Development". Bob Nizich then reviewed the National Institutional Training (NIT) program, the General Industrial Training (GIT) program, and the Critical Trade Skills Training (CTST) program. Bill Fields reviewed the Training in Business and Industry (TIBI) program, the Ontario Training Incentive Program (OTIP), the Ontario Career Action Program (OCAP), the Ontario Employee Assistance Program (OEAP), the Board of Industrial Leadership and Development (BILD) Special Initiative, and the institutional training programs available through the colleges.

Conclusion. The discussion following each presentation revolved around the following points, questions, and concerns:

- The long-term OTIP trainee incentive was seen as a disincentive to employer participation in OTIP.
- Clarification was requested on how a company arranges for out-of-province instructors or out-of-province training under TIBI II.
- Concern was expressed that local Canada Employment Centres, Skills Development Division field staff, and college consultants do not consult with CITCs sufficiently to determine local training needs. (The discussion indicated that this problem may be confined to certain regions of the province.)
- The view was expressed that the province and the federal government should not change guidelines for their training programs too quickly or too often, since such changes are confusing to employers. A period of stability was seen as being valuable.

Improving workplace-centred training

Presenters

Joe Milloy, Chairman, Hamilton CITC
Keith Nixon, Mohawk College
George Luedekke, Mohawk College

Workshop team

Rod McLeod, Canada Employment and Immigration Commission
Doug Jennings, Skills Development Division

Summary. The focus of this workshop was on techniques for developing training based on the DACUM model. In developing a training program, three questions have to be asked:

1. Where am I going?
2. How will I get there?
3. How will I know when I have arrived?

The steps involved in the development of a program based on DACUM were described, and a sample exercise was conducted. The objective of DACUM is to define the competencies required in doing a job. As well, new generic skills are being developed for today's technologies that reflect skills rather than occupations. The DACUM model represents a move towards student performance objectives and translates into a competency-based training delivery model. The Hamilton Industrial Training Advisory Committee

(HITAC) is using a competency-based modular approach in which workers spend one year in a training centre between two years in industry.

The role of the Ministry of Colleges and Universities in program design is to set minimum standards and guidelines for the development of training profiles. In competency-based training, the student's ability is compared to Terminal Performance Objectives (TPOs), rather than to the performance of other trainees. The ministry is building inventories of standards that will provide an information base intended to assist trainers in designing programs. These inventories will be the basis for the standardization of training programs across the province.

Mobilizing the community

Presenters

Mike Nolan, Chairman, Peterborough CITC
Dave Moffat, Manager, Management and Professional Relations Development, Canadian General Electric
Jim Gard, Chairman, Durham CITC
Gord McCrae, Durham College
Mike Morrissey, IC Electrical Drafting, Canadian General Electric

Workshop team

Martin Pearce, Canada Employment and Immigration Commission
Judi Walsh, Skills Development Division

Summary. Two workshops were presented on "Mobilizing the Community". One was presented by the Halton CITC; the other was a joint presentation by the Durham and Peterborough CITCs.

There were some common threads running through the two workshops. For example, both workshops highlighted the fact that the primary task in mobilizing the community is the formation of a viable central or executive committee. This committee does not have to be large, but it must be committed and self-directed. Further organization of a CITC involves the establishment of subcommittees with specific tasks (e.g., occupational analysis, curriculum, communication).

Most of those involved considered communication to be the pivot around which a committee both survives and grows. Both

groups emphasized the need to expand communication links to the widest possible audience. The presenters themselves have broadened their horizons beyond traditional contacts (in government, colleges, chambers of commerce, etc.) to embrace such groups as regional governments, regional economic development groups, secondary schools, and community social agencies.

Communication can be achieved through:

- printed handouts
- regular newsletters
- radio and TV spots
- affiliation with local chambers of commerce or boards of trade
- affiliation with industrial associations
- liaison with resource people at all three levels of government
- open general meetings
- speaking engagements and video presentations

Both presenting groups had participated extensively in the exchange of information with students and teachers in secondary schools. The notion of building for the future was obviously a serious consideration.

Conclusion. Both presenting groups felt that a prime way to mobilize the community is to identify community needs, including traditional training needs, as well as the special needs of such groups as laid-off apprentices. Community-needs assessment can rally community support, if the community can clearly identify with the direction that the CITC is taking.

The development of active subcommittees with high industrial participation levels is a key factor in the maintenance of momentum. The main concern expressed by the workshop participants was the seemingly excessive time taken by government to decide on matters that affect each CITC.

Both presenting groups had the following ongoing concerns.

- the lead time required by governments to react to committee requests;
- the demand on CITC members' time;
- the CITCs' ability to revitalize committee activities by bringing in new members; and
- the role of labour within the committee process.

Occupational forecasting

Presenters

Maria Gravel, Canada Employment and Immigration Commission
Barry Pervin, Skills Development Division
Ray Vafa, Ontario Manpower Commission
Helmut Zisser, Skills Development Division

Workshop team

Geraldine Sperling, Canada Employment and Immigration Commission
Ray Vafa, Ontario Manpower Commission
Helmut Zisser, Skills Development Division

Summary. Labour-market information is used by the provincial government in making policy and funding decisions on training in Ontario. The information is also used in the process of designating occupations and in the planning of a wide range of training activities.

Methods of deriving labour-market information were discussed. These methods employ both a "top-down" approach, in which econometric models are used, and a "bottom-up" approach, based on local labour-market information.

Two econometric models were described: the Ontario Manpower Projection (OMAP) system and the Canadian Occupational Projection (COP) system. Both models are based on assumptions about the economy and demography which are, in turn, used to create scenarios of possible future conditions related to job openings and labour supply.

Local labour-market information is gathered through need surveys conducted by community industrial training committees, through private sector consultations, from selected sector studies, and by tapping into the employer-college network.

One of the fundamental differences between the two basic approaches is the level of detailed information gathered. The econometric models provide very general data and may be insensitive to changes among related occupations. Local labour-market intelligence, while providing a greater level of occupational detail, may not be comprehensive and may, therefore, provide a spotty picture of labour-market requirements.

At this stage, both approaches are still in their infancy and neither approach can provide all of the answers. A mixture of the two approaches is required, thereby allowing for the validation and cross-validation of information. The approaches are undergoing change, as they are refined in the light of experience. There is a commitment to the development of good information on which training decisions can be based. The process of developing this information is recognized as being an ongoing endeavour and not a one-shot effort. More important, it is a consultative process that gives both business and industry a stake in training.

Conclusion. Labour-market information and forecasting are important activities that help keep the supply and demand of skills in balance. They receive good support through the participation of the CITCs and the need-survey process.

The development of market information is an ongoing process that requires an active partnership between industry (both labour and management), trainers, and government. In this process, it is important not to lose sight of the objective, which is the production of information that will help to bring about appropriate training responses to the needs identified.

Other conclusions included the following:

- It is important that activities be co-ordinated in a manner that does not impose a paper burden on employers.
- It is important that a variety of tools, including econometric modelling, sample surveys, contact networks, and so on, be used in the acquisition of market information.
- More information is required on how the designation process works at both the national and regional levels.
- There is a need for the sharing of labour-market information among all participants in the skill development effort.

Roles of CITCs

Presenters

Chuck Morris, Chairman, Halton CITC
 Muriel Johnson, Liaison Director, Halton CITC
 Lynda Rattenbury, G.D. Searle & Co. of Canada Ltd.
 Vito Barbera, Hercules Canada Limited
 Bill Rowney, Milton Machine Shop
 George Croucher, Procor Limited

George Paylor, CIL

John Moland, Chairman, Sudbury CITC

Richard Steel, Chairman, Victoria County CITC

Frank Edwards, Chairman, Stormont, Dundas & Glengarry CITC

Joe Celotto, Celotto Tool & Mould Company

Workshop team

Lorraine Smith, Canada Employment and

Immigration Commission

Don Ahrens, Skills Development Division

Summary. The morning session, combining the workshops on "Roles of CITCs" and "Mobilizing the Community", was presented by HIT, the Halton Community Industrial Training Committee.

The afternoon workshop, "Roles of CITCs", included presentations by representatives of the Lambton, Sudbury, Victoria County, Cornwall, and Wallaceburg CITCs.

During both sessions, a question-and-answer period followed the presentations. Most questions were directed to and answered by, the CITC presenters.

It was agreed that, while CITCs have survived and have continued to maintain their visibility, a change is required in order for them to grow.

The members of the CITCs saw their purpose as follows:

- to enhance the ability of industry to participate actively in their communities;
- to work together and share information with fellow members of their industrial community;
- to allow industry to be involved in constructive dialogue with the federal and provincial governments in order to enhance human resource planning; and
- to assist in the articulating of training needs and the shaping of training in Ontario, both now and in the future.

The CITCs saw their future role as one of independence; they did not see themselves functioning as an arm of a college or of the federal or provincial government. They expect to:

- expand into advanced technology skills training;
- sell ideas to community industries;
- be involved in training; and
- help industry survive by giving industry a voice.

The CITCs saw the role of government as follows:

- to provide support, direction, and co-ordination;
- to upgrade survey techniques;
- to develop an accessible data bank of training modules;
- to provide the flexibility to respond to training needs; and
- to provide funding to support the training required to meet these needs.

Conclusion. It is predicted that the future years will be "lean". Complicated jobs will be simplified; repetitive jobs will be phased out; and new occupations will emerge. There will be a scarcity of trained workers in areas that require highly developed skills. Therefore, a greater emphasis on skill upgrading will be required. Through the upgrading of existing employees, opportunities will be created at the entry level for the unemployed.

School-to-work transition

Presenters

Jim Brown, Co-ordinator of Technological Studies, The Waterloo County Board of Education

Abe Nightingale, Skills Development Division

Ray Taylor, General Manager, Marcon Custom Metals Limited

Workshop team

Rod Mcleod, Canada Employment and Immigration Commission

Bill Rapson, Skills Development Division

Summary. Ontario Schools, Intermediate and Senior Divisions (OSIS) was described.

OSIS outlines the program requirements for Grades 7-8 and 9-12 and is to be implemented September 1, 1984, replacing the present system.

At present, the Secondary School Graduation Diploma (SSGD) requires twenty-seven credits, of which nine are compulsory; the Secondary School Honours Graduation Diploma (SSHGD) requires an additional six credits.

Under OSIS, an Ontario Secondary School Diploma (OSSD) will require thirty credits, of which sixteen will be compulsory. Grade 13 credits will be replaced by Ontario Academic Credits (OACs) which will be required for university entrance. A Certificate of Education will be awarded to early-school-leavers when they complete fourteen credits, six of which will be compulsory.

Students will be provided with an Ontario Student Transcript, listing the subjects taken. OSIS emphasizes the importance of work experience, co-operative education, and Linkage.

Government programs provide training assistance for employers and for students on their entry into the work force. These programs include the Ontario Career Action Program (OCAP), the Ontario Training Incentive Program (OTIP), the General Industrial Training (GIT) program, and the Critical Trade Skills Training (CTST) program.

Computerized data banks are available to assist students in making career choices; examples include the Student Guidance Information Service (SGIS) and CHOICES. Detailed training paths relating to careers in electronics, food preparation, and heating, refrigeration, and air conditioning have been prepared.

Linkage I aligns secondary school programs and apprenticeship training. The apprentice receives credit for the successful completion of the "basic" portion of the in-school component of apprenticeship, normally completed at college, while he/she is still in secondary school. Linkage I avoids the repetition of courses and allows trainees to complete their apprenticeship earlier than would otherwise be the case.

A student who participates in a Linkage I program is allowed to dispense with the basic in-college term in the following trades: auto body repairer, baker, cook, general machinist, hair stylist, major appliance repairer, millwright (construction), millwright (industrial), motor vehicle mechanic, and retail meat cutter.

Linkage II aligns secondary school and college programs; advanced standing is not compulsory.

Linkage II programs are being field-tested with 1800 students in the following fields: architectural draftsman, basic engineering draftsman, electronics, heating, refrigeration and air conditioning, welding, the forest products industry, mathematics for technology, accounting, data processing, secretarial science, and business mathematics.

The experience with co-operative education of one company involved in custom metal fabrication was described. The company is committed to training and has eight apprentices at present. The company's original co-operative program, which involved having trainees spend two weeks in school and two weeks in industry while enrolled in Grade 12, worked well. This program was later changed to one in which trainees spent half days in school and half days in the workplace; this did not prove as suitable. The present arrangement, whereby trainees spend two months in the workplace during the summer, is preferable.

There are many benefits to co-operative education. It allows both the student and the employer to find out whether the student is suited to the occupation; it shortens the length of apprenticeship; and it provides motivation for students while in school.

Conclusion. The CITC is a natural link between schools and all other agencies involved in training. By working with schools, CITCs can assist in smoothing the transition for students from school to work through:

- the development of Linkage and co-op programs;
- the active involvement of industry in the development of curricula;
- the interpretation of industrial needs to the education system and vice versa; and
- the development of alternative models to replace the traditional Career Day.

The impact of advanced technology

Presenters

David Hogg, Director, Educational Programs, CAD/CAM Centre
George Paylor, CIL
Stan Park, Esso
Larry Woods, Skills Development Division

Workshop team

Brian Gardiner, Canada Employment and Immigration Commission
Larry Woods, Skills Development Division

Summary. Until recently, industry could afford the luxury of adapting to changing technologies slowly. Now, change is rapid, and we must plan to adapt much faster. Industries must identify emerging technologies and prepare by training employees in the new technology. Employers must assess the aptitudes of their people and then try to slot the trainees into positions in which they can best absorb the training to be provided.

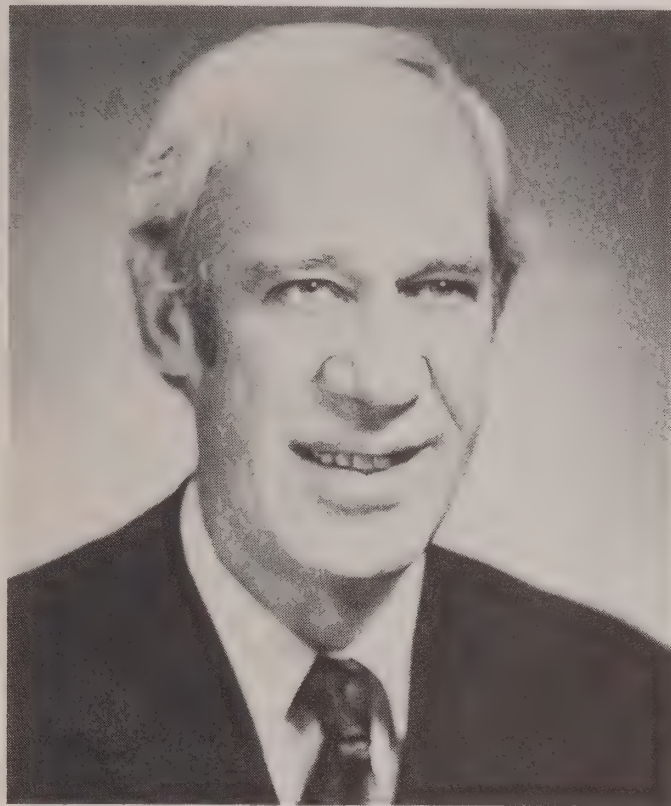
Youth should be encouraged to become risk takers - tomorrow's entrepreneurs and businesspeople - rather than being content to work for someone else.

With the new Advanced Technology Centres, the emphasis is on the transfer of information from the centres to employers. The characteristics of small employers were explored to determine how a transmitter of information could pass information in a way that would be understood. The centres were developed by business and are controlled by small and medium-sized businesses. The centres are willing to provide seminars, information, and consulting services to industry at reasonable rates.

Conclusion. Advanced technology is here, and industry must adapt and retrain existing workers. Industry must be made aware of what information is available to help it and how to obtain assistance in responding to advanced technology.

CITC Seminar Evaluation

	<u>Excellent</u>	<u>Satisfactory</u>	<u>Unsatisfactory</u>		
<u>Overall conference</u>					
o Facilities	4	27	0		
o Style and format	6	23	0		
o Topics/keynote speaker	3	17	3		
	<u>Very Helpful</u>	<u>Helpful</u>	<u>Not Helpful</u>	<u>Too Limited</u>	<u>Too Broad</u>
<u>Workshop topics</u>					
o Assisting displaced workers	3	4		1	
o Federal and provincial programs	7	11	1		
o Improving workplace-centred training	5	11		1	
o Mobilizing the community	12	12	1		3
o Occupational forecasting	1	10	2	1	1
o Roles of CITCs	12	13	2	1	1
o School-to-work transition	3	7	3	1	1
o The impact of advanced technology	4	13	6	2	1



Kenneth E. Hunter

Industries' investment in manpower training vital — Hunter

The following is an address by Kenneth E. Hunter, Assistant Deputy Minister, Skills Development Division, to the Durham Organization for Industrial Training on January 25, 1984:

We all have a motto. Vince Lombardi's was "When the going gets tough, the tough get going." Then there's Yogi Berra's immortal quote, "It's never over till it's over." Or how about Leo Durocher's "Nice guys finish last." Mine is Isaiah 1:18. For the non-bibliophiles, Isaiah 1:18 reads: "Come now, let us reason together." To me, that must be the essence of our approach to the future of skills development in Ontario. We must confront our task honestly, rationally, and empirically.

And we must do it together. If we approach the future with an "I'm all right, Jack" attitude, if we approach the future out of fear, our future will be "nasty, brutish, and short". When I was reading over this text last night, in preparation for this evening, I got this far and stumbled over the words "The Future" — capital "T", capital "F".

We all have our personal vision of The Future beyond the next millennium.

We all know about Orwell's vision. Some of us speak of The Future as if it were a final examination — challenging at best, frightening at worst, something for which we must prepare now just to survive.

Others speak of The Future as if it were akin to a summer vacation, a way to escape from and forget the turmoil of the present tense. Or present tension.

To me, the future is what we make it.

We can allow present trends to continue, for better or for worse. Or we can choose, collectively, to shape a future that fulfils our economic and social needs.

We must choose. Choose our objectives and our priorities.

In a recent address, the Treasurer of Ontario indicated that the primary objective of the Government of Ontario is the creation of meaningful employment. Mr. Grossman also indicated that a key strategy for achieving that goal is enhancing the skills and knowledge of the labour force.

Clearly, a skilled labour force gives our economy a competitive edge in the global marketplace. As Robert Reich of Harvard put it:

"Japan, West Germany, France, and other industrialized nations have sought to shift their industrial bases towards products and processes that require skilled workers. Skilled labour is the only dimension of production where these countries retain an advantage. Technological innovations can be bought or imitated. But production processes that depend on skilled labour must stay where the skilled labour is."

In that context, the efforts of those of us involved in skills development are central to economic regeneration. We must be conscious of the importance of what it is we do, of the responsibilities we have assumed.

In order to fulfil those responsibilities, labour, management, education, and government must bring their collective intelligence to bear on critical skills-development issues.

The CITC (Community Industrial Training Committee) provides one forum for the thorough and thoughtful consideration of these issues. It provides the industrial community with the opportunity to inform and advise government with a unified voice.

Perhaps the most critical task is improving the industrial community's ability to plan its labour requirements. The issue is this: "Are people important to the enterprise?" If they are, then the development and use of that resource should be planned with the same degree of care applied to other resources.

The reality is that people come first. Without a trained operator, a microcomputer is nothing but a piece of hardware.

The primacy of people is evident in the following anecdote from Andrew S. Grove, president of Intel Corporation, a major manufacturer of silicon chips:

"One of our sophisticated pieces of production equipment, an ion implanter, drifted slightly out of tune. The machine operator was relatively new. While she had been trained in the basic skills to operate the machine, she hadn't been taught to recognize the signs of an out-of-tune condition. So she continued to operate the machine, subjecting nearly a day's worth of almost completely processed silicon wafers to the wrong machine conditions. By the time the situation was discovered, material worth more than one million dollars had to be scrapped."

Intel had the right capital resource, but the wrong human resource and paid the price - one million dollars.

I recognize that it is awkward to think of people as a "resource", to think of people in the same way we think of a computer, or an NC lathe, or a wood harvester. Nonetheless, it is often the case that people would

be better off if they were treated like machines.

Any vital company has plans to develop or acquire capital equipment. By contrast, few companies have detailed plans for their human resources.

Perhaps one reason for the general lack of effective manpower planning is that capital equipment is treated as an asset; people are not.

A manager who allowed a company's capital stock to become obsolete would soon be looking for "other opportunities". However, a manager who fails to ensure that the company's employees keep abreast of new technologies or work practices is not necessarily seen as a poor manager.

Because capital stock is considered to be an asset, funds allocated to the purchase or modernization of equipment are considered an investment. On the other hand, funds allocated to training are treated as an expense.

If training is treated as an expense, it may not make economic sense. But think of it this way. A company purchases an \$8000 microcomputer to improve productivity. The company does not expect that the cost will be recovered in the first year of use. Quite the contrary; the initial cost is amortized over the expected working life of the computer.

On the other hand, the company is asked to allocate \$8000 to train a set-up operator. The company accounts for this amount as a cost against the current year's income. However, the company fails to understand that the trained worker will generate incremental productivity gains each year the worker is with the company.

I would argue that the \$8000 committed to training is as much an investment as the \$8000 committed to a computer. I would also argue that managers should expend the same energy on planning their manpower requirements as they do their capital requirements.

Certainly, manpower planning is still in its infancy. However, progress is being made. As you may know, the

Ontario Manpower Commission and the Canada Employment and Immigration Commission have produced a human-resource planning manual; they are field-testing its suitability.

While we may not be at the level of sophistication one might like, any planning is better than no planning.

Manpower planning is of direct benefit to the company, but it is also of benefit to the economy as a whole. As you know, the ministry is attempting to get a better handle on changes within the labour market. Province-wide data are essential if training programs and funding programs are to be responsive to labour market changes.

However, macro-economic data are generally an aggregation of micro-economic data provided by employers through community industrial training committees. If the microdata are wrong, the macrodata cannot help being unreliable.

During a period of rapid change, labour market data are essential if we are to meet present and potential needs. CITCs can play a key role in encouraging their industrial communities to think of people as the key component of profitability and to undertake human-resource planning.

Based on "good numbers" the skills development system can make informed judgements about the impact of labour market changes and can develop appropriate responses to these changes.

One vital issue is demographic change. All indications are that the number of young people entering the labour force will decline in the future.

The proportion of the labour force in the fifteen to nineteen age group, which stood at 12 per cent in 1981, will decline to 9.5 per cent in 1986. Persons in this age group, representing new labour-force entrants, will experience a net decline at an average annual rate of 2 per cent during the 1981-86 period. Such a decline is unprecedented.

This simple statistic will have major effects in the labour market. As the number of labour-force entrants

declines, our economy may well face a net labour shortage in the long term.

Given this decline, employers and society as a whole will have to dispense with their preconceptions about male and female workers, and the occupations suitable to each. Employers will have to recruit women for occupations which have been the traditional preserve of the male of the species.

I recognize that many employers are reticent to employ women in non-traditional occupations. Employers feel that many women lack an understanding of technical occupations and do not have the hand-tool skills that boys learn at their father's knee. Therefore, employers feel that women may not be as productive as quickly as male employees.

To overcome these difficulties, the provincial government offers a number of college programs to acquaint women with technical occupations and to assist them to enter those occupations.

The federal government supports women participating in such provincial programs as INTO (Introduction to Non-Traditional Occupations) and WITT (Women Into Trades and Technology), and BTSD (Basic Training for Skills Development).

As you know, the federal government also provides enriched support for the training of women in the workplace. Then, of course, there is TIBI (Training in Business and Industry), which assists all employees to upgrade their skills.

The point is, support for women seeking to enter non-traditional occupations is available. And there is no lack of women interested in non-traditional occupations.

The only question is: Do employers recognize that it is in their best economic interest to hire, train, and promote women?

Our economy's ability to utilize all the resources of its participants, regardless of gender, will be a primary determinant of our economic success.

The task of planning and developing the human resource rests squarely on the manager's shoulders. Training is not an addendum; it is central to the manager's responsibility. I would argue that the manager who ignores the human resource is not a good manager.

Perhaps Mr. Grove summed up the point: "The manager's output is the output of [the] organization, no more, no less. A manager's own productivity depends on eliciting more output from [the] team.

"A manager generally has two ways to raise the level of individual performance: by increasing motivation, the desire of each person to do [the] job well, and by increasing individual capability, which is where training comes in.

"Training is, quite simply, one of the highest leverage activities a manager can perform."

What holds true for the individual manager holds for the entire enterprise, and for the economy as a whole.

Assisting the Ontario economy to plan its human resources for the future is, by any measure, a massive task, an important task. It is a task which will require us to pool our intellect, for no one person or group has all the answers.

Government, education, labour, and management all have a role to play, a contribution to make.

For making your commitment to achieving the objective, I thank you and wish you well.

Automatic Machinist newly regulated

On January 18, 1984, a new training regulation (Ontario Regulation 28/84) for the trade of automatic machinist was promulgated under the authority of the Apprenticeship and Tradesmen's Qualification Act. The new regulation, together with a detailed training profile for the trade, represents the culmination of three years of developmental work by

the provincial advisory committee for the trade.

The automatic machinist regulations are in a new simplified format. They outline a flexible training period of a maximum of 8000 hours and 720 hours of in-school training which will be available in a block-release or day-release format to suit the needs of individual employers and apprentices. The minimum education requirement for entry into an apprenticeship in this trade is Grade 10. Certification is voluntary.

What does an automatic machinist do and what skills are required? He/she sets up and operates single- and multi-spindle machines to close tolerances, has a broad understanding of metallurgy, is familiar with the use and care of precision instruments and measuring equipment, and has a detailed knowledge of blueprint reading.

For further information about training and/or certification in this newly regulated trade, contact any of the regional offices of the Skills Development Division or the Advisory Committee Chairman for Automatic Machinist in the Planning and Development Branch of the division (telephone: 416-965-4051).

Resources

The following are recent Skills Development Division publications pertaining to on-the-job skills training which may be of interest to employers and/or employees:

- o Apprenticeship (both English and French versions available)
- o Ontario Career Action Program
- o Ontario Training Incentive Program
- o Training in Business and Industry (This is a reprint of our Upgrading publication.)
- o Employer's Guide (to federal and provincial skills-development programs offered in Ontario)
- o Instructor's Handbook (a guide to the development and operation of workplace-centred training programs)

Copies of any of these publications are available free of charge from:

Publications Co-ordinator
Skills Development Division
Ministry of Colleges and Universities
900 Bay Street
Toronto, Ontario
M7A 1L2

416/965-5388

High-tech education at Ontario Place

The Ministries of Colleges and Universities and Education will have one of the largest displays ever at Future Pod this year, covering almost 370 m² of floor space.

Within that 370 m² participants will be able to try an educational microcomputer

designed to meet government specifications. They will be able to sample the same array of career options that students can sample through the Student Guidance Information System (SGIS) and Telidon. The SGIS-Telidon project is currently undergoing field trials at 100 locations in Ontario.

Distance Education is one way of continuing your education at home. Future Pod will provide a hands-on demonstration of how the computer may alter the way in which these educational programs are delivered.

Conceived in 1981, Future Pod is believed to be Canada's only permanent display of high technology. At Future Pod, private industry joins government agencies to demonstrate advance technologies that are just beginning to influence our lives.

Future Pod will be opening its doors on May 10 and is located in Pod 5 at Ontario Place.



Continued from page 1

Wingham, Clinton, and other communities, at businesses such as Goderich Elevator, Huronia Welding, Maitland Engineering, Bently Accountants, Hill and Hill Farms Ltd., Jim Hayter Chev/Olds, Fleck Manufacturing, and others.

More than one hundred employees are enrolled in courses at the thirteen businesses. They study two hours a week while receiving regular pay. On average, six participants are involved at each location, but course work is done in smaller groups so that the day-to-day operations of the companies are not impeded. Learning takes place in two-hour blocks, but each participant is expected to do one hour of homework on his/her own time for each hour of instruction provided in class.

The course, entitled Microcomputer Applications for Business, was designed by Mr. Machan and Robert Simpson, Conestoga's manager of continuing education for Huron County.

At each course location, an IBM personal computer has been made available for the duration of the course, enabling employees to practise at other times and showing the advantages of computer technology for small businesses.

Microcomputer Applications is a course of flexible length, varying from thirty to sixty hours depending on the specific needs at each company and the training requirements of the employees. The major topics covered are microcomputer hardware and software, disc usage and care, word processing, spread sheets, data storage and retrieval, and other applications relevant to a particular business or work function.

Plans for the course were made last fall, following a needs assessment conducted by the Huron CITC. Ian Moreland, chairman of the Huron CITC and an official of Western Foundry in Wingham, then approached Conestoga College with a proposal. An information day was sponsored in Clinton, and many area businesses sent representatives to enquire about the training program.

John Sawicki, information officer for Conestoga College, said that great interest has been generated as a result of the courses. The continuation and expansion of the program is to be discussed at a spring meeting of the CITC, and the prospects are favourable.

Métiers

Métiers, la version en français du Skills, est disponible sur demand auprès de l'éditeur.

Lettres et articles seront très appréciés et doivent être envoyés au:

Le rédacteur en chef
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Story ideas and articles are most welcome, as are your comments about this newsletter.

If you know of anyone who you feel would enjoy reading Skills, please notify:

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